

L200CWE4K-22D

Super Red

5mm, Flanged Cylindrical, 8.6mm Height
22° viewing angle

DWG BY:
LL / GP
05-29-07

CHK BY:
PL
05-30-07

QA:

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MFG:

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REVISION LTR: -

05-29-07

Absolute Maximum Ratings at Ta=25°C

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	35	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Electrostatic Discharge (ESD)	150	V
Operating Temperature Range	-30°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	2000	4200	---	mcd	I _F =20mA (Note 1)
Viewing Angle	2θ _{1/2}	---	22	---	Deg	Note 2
Peak Emission Wavelength	λ _p	---	636	---	nm	I _F =20mA
Dominant Wavelength	λ _d	---	626	---	nm	I _F =20mA (Note 3)
Spectral Line Half-Width	Δλ	---	18	---	nm	I _F =20mA
Forward Voltage	V _F	---	2.0	2.8	V	I _F =20mA
Reverse Current	I _R	---	---	50	μA	V _R =5V
Radiant Intensity	---	---	40	---	mW/sr	I _F =20mA

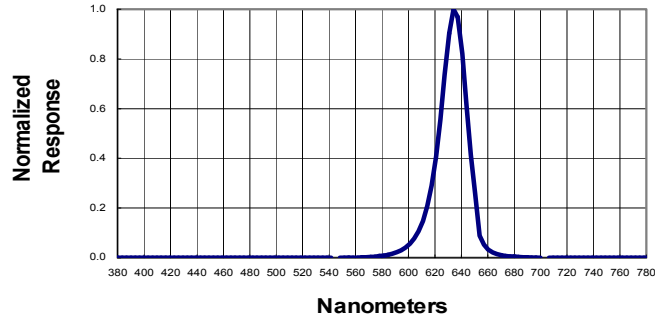
Chromaticity Coordinates	x: 0.70	y: 0.29	I _F =20mA
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Note:

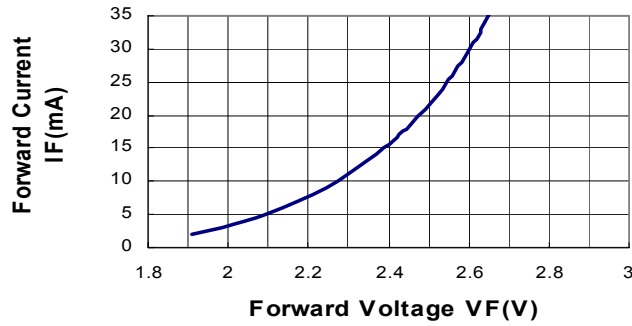
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- Forward voltage measurement allowance is ±0.1V
- Luminous Intensity Measurement Allowance is ±10%

Typical Electrical / Optical Characteristics Curves
 (25°C Ambient Temperature Unless Otherwise Noted)

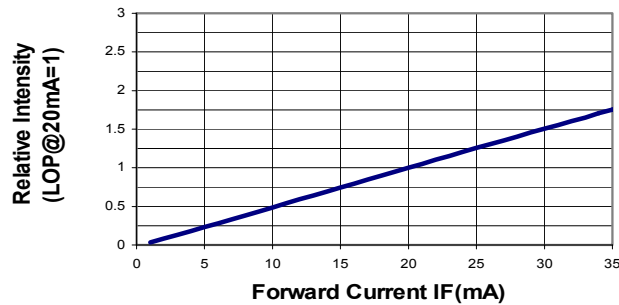
Spectral Radiance (Peak @ 635nm)



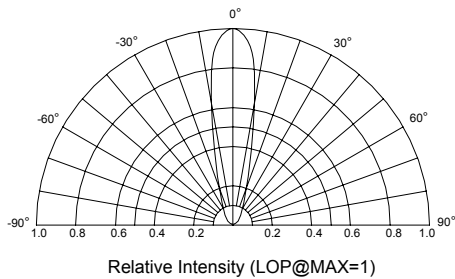
Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern



Forward Current Derating Curve

